NOTES ON MANIOLA JURTINA L. SSP. CASSITERIDUM GRAVES AND PARAGE AEGERIA L. SSP. INSULA HOWARTH IN THE ISLES OF SCILLY, AND MANIOLA JURTINA FROM LUNDY ISLAND

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The Scilly Isles races

M. JURTINA is a variable species throughout its range in the British Isles and the status of the three named subspecies separated from ssp. *insularis* Thomson (the form found in England, Wales and much of Scotland) has been questioned (Emmet & Heath, 1989). These races are ssp. *iernes* Graves (Ireland), ssp. *splendida* White (parts of Western Scotland and some Western Isles) and ssp. *cassiteridum* Graves (Isle of Scilly). It is suggested that *jurtina* exhibits a tendency towards larger and more colourful forms on the Atlantic coast and that the named races are simply the most extreme expressions of a cline rather than being separate subspecies.

Subspecies *cassiteridum* is particularly characterised by having the underside, especially of the hindwings, significantly speckled due to strong development of the small, dark striae that are found on all the British races. It also tends to have more upperside fulvous markings in both sexes than ssp. *insularis* from the mainland.

P. aegaria ssp. *insula* Howarth (Plate G, Figs. 1 - 4) seems to be generally recognised as a separate and entirely distinguishable race found only on the Isles of Scilly, and is more akin to the Continental form than those found in the rest of its British range. The most noted difference is that the pale spotting, which is creamy or white on the mainland, is of a distinctly orange shade in *insula*.

Both species were generally common on the inhabited islands, and of the same form on all of them. It is said that specimens of jurtina from the southwest peninsula of England may be almost indistinguishable from those on the Scilly Isles (Emmet & Heath, 1989). I have not seen the species in this area and so, for present purposes, can only observe that in the Scilly Isles jurtina is variable, as it is elsewhere, and some specimens were found which conformed exactly to the description of cassiterideum while others tended more towards the usual mainland form, having a less "speckled" undersurface to the hindwings. However a series of specimens covering this whole range is entirely distinguishable from an equivalent series from Dorset due to the strongly contrasting nature of the underside pattern elements. It was interesting to find two female specimens of ab. fracta Zweiglt (Plate G, Figs. 5 - 6), both extreme, within a few hours of arriving by plane on St. Marys. Specimens as well developed as these examples are very rare and less striking expressions of the form are uncommon. One was spotted feeding from a thistle flower at the edge of a cut hay meadow and the other was flying over a rough cliff-top with many others of its species. The contrasting pattern of the under-surface of this race makes these aberrations particularly striking. No further aberrations were found despite careful search.

P. aegeria was found both in the sort of partially shaded areas where one might seek it on the mainland and also in much more open areas, such as sunny hedgerows or open expanses of bracken. I found that the upperside of this race generally exhibits more orange spotting than the mainland form, but that this was a variable characteristic and some specimens were very similar to those I would find in Dorset. More consistent was the extension of the pale markings near the base on the underside of the forewings, forming a large pale patch in this region quite unlike the mainland form. This race seems to justify its subspecific status.

Maniola jurtina L. from Lundy Island

Lundy Island sits at the entrance to the Bristol Channel, about 55 miles from the nearest landfall on the mainland (Hartland Point, Devon). It is a small, wind-swept granite island with a flat plateau top of short grass and heathland, with steep cliffs on all sides. Tree cover is virtually absent except for a small sheltered area at the southern end. With the plateau so level, little protection is available from the wind for the butterfly species that inhabit the island.

I was able to spend a few hours on Lundy on 20 July 1996 and had enough time to make a quick examination of the local population of *jurtina* (which was common in grassy areas), although in the time available it was not possible to examine enough butterflies to draw any firm conclusions about the nature of this race. However a few observations might be of interest. Although, as with any race of *jurtina*, the adults are variable, it does appear that this race may be as distinct from the mainland form as are the other, named, subspecies.

The adults appeared to be noticeably smaller than other races. Emmet & Heath (1989) give the following average wingspans for the different subspecies:

ssp. *insularis*: male 40-55mm, female 42-60mm ssp. *iernes*: male c. 52mm. female c. 56mm ssp. *cassiteridum*: male c. 49mm, female c. 53mm ssp. *splendida*: male c. 50mm, female c. 54mm

From an, albeit, small sample of adults (four males and seven females) kept for examination from Lundy the average wingspans were: male c. 44mm, female c. 47mm. These specimens are clearly smaller than the other Atlantic races and towards the smaller end of the wide size range given for ssp. *insularis*.

It is interesting to note this small size, particularly in view of E.B. Ford's comments (1945) about races of butterflies on exposed islands. He argues that in such habitats butterflies have repeatedly evolved forms with smaller wingspans, so presenting less surface area to the wind which might easily

blow the butterflies out to sea. He gives, as an example, a very small race of *Argynnis aglaja* that has evolved on the tiny wind and wave-swept island of Flodday at the southern extremity of the Outer Hebrides. A similar argument might apply to Lundy *jurtina*.

As with ssp. *cassiteridum*, the underside markings of the male butterflies were more distinct than in the English race and rather paler on the hindwings. The same description applies to the females, in which the central median band of the hindwings was often very pale. Not enough butterflies were examined to note any definite tendency in the upperside markings of either sex, although from what was seen it is likely that the males generally have a larger expanse of fulvous than the mainland form and that the females have a greater tendency to show fulvous in the forewing "cell" area than in ssp. *insularis*.

Acknowledgements

I am grateful to Mr David Wilson for photographing the specimens depicted in Plate G.

References

Emmet, A.M. & Heath, J., 1989. *The Moths and Butterflies of Great Britain and Ireland*, Vol. 7, Part 1. Harley Books, Colchester.

Ford, E.B., 1945. Butterflies. The New Naturalist series, Collins, London.

Nola confusalis H.-S. (Lep.: Nolidae) in north-west Kent and Moray.

A specimen of this species visited my garden m.v. light at Dartford on 9.vi.1996, to be followed by another on 11.vi.1996. Chalmers-Hunt (Butterflies and Moths of Kent, sup. in *Ent. Rec.* 74: 79, 1962) states that this moth appears to be extinct in West Kent (VC 16), and this is not contradicted in 1980 in a further supplement, while Plant (*Larger Moths of the London Area*, 1993) confirms its continued absence in the Kent portion extending twenty miles from central London.

The large area of Joydens Wood which lies close to my address has probably retained this moth over the intervening one hundred and thirty years in view of its comparative inaccessibility as a private woodland until the Second World War, and despite partial destruction by the Forestry Commission subsequently.

In view of the apparent scarcity and local nature of the species in parts of Scotland it is perhaps worth noting that I took two specimens at Grantownon-Spey, Moray on 22.vi.1985, especially as the species is not recorded for the well-worked neighbouring area of Badenoch, Inverness-shire by Harper (*Ent. Rec.* **66**: 58), nor by Barbour for Banffshire (*Ent. Rec.* **88**: 1) nor for Aberdeenshire and Kincardine by Palmer (*Ent. Rec.* **86**: 33) in his excellent review of the lepidoptera of these two counties.– B.K. WEST, 36 Briar Road, Dartford, Kent DA5 2HN.